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NORTH-EAST NE MASTER GARDENERS

Seed Savers Exchange: The First Ten Years

WITHDRAWN

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Gift

ERNEST STRUBBE - CORN BREEDER

(I had been driving since early morning. Late in the afternoon I arrived at Ernest Strubbe's farm in western Minnesota just ahead of a huge black prairie thunderstorm that was rolling in from the west. Ernest met me at the door and it cut loose raining just as we went inside....There was an old wood stove over by a desk where he had been doing some paintings and matting some photos of birds and wild flowers. The archway into the next room was just solid with ears of corn. Back through it I could see a window lined with corn and a rod high across the room that had corn hanging all over it. Shelves on the wall in the front room were lined with ears of corn hanging on display....It was every color of the rainbow--reddish blacks to pure whites, emerald greens, turquoise blues, light blues, purples, pinks, browns, calico blues, calico pinks, white-capped reds, oranges, yellows....He said the sun had faded most of it, but it was still dazzling. He took me into a back room and showed me a bunch of it that the light hadn't got to. Then he brought out two display cases that he had made....)

KENT: These are the most beautiful dent corns I've ever seen. How did this whole process start?

ERNEST: In 1929 I crossed some yellow field corn with some black popcorn, Black Beauty which Shumway dropped a few years ago. What I got was a dark-colored black/bronze dented ear. At first the color was real spotty with bronzes and brownish/purples. I worked with it for quite awhile and finally got the color really even and uniform. I was pretty proud of that....Then I crossed some of that original dark-colored black/bronze with some Rustler's White Dent, which was an old field corn that farmers around here used to raise in the 1920s. A lot of interesting things started cropping up right then. That year I got one ear that was the start of my Blue/Gray Dent. When I planted seed from that the next year, you should have seen the firing and albinoism. When it started coming up it looked just like somebody had sprinkled salt and pepper all over the field. About 25% of the seedlings were pure white--no chlorophyll. They grew until they were about 3-4" tall, until they used up the food in the kernel, and then they died. In lessening degrees it showed up the following three or four years until it weeded itself out.

KENT:....and you said firing?....

ERNEST: Yes, that appeared in about 10% of the other plants. When they were about ready to tassel suddenly the bottom leaves, and sometimes all of them, just shriveled up and fell off. But that weeded itself out too, since they died and didn't produce seed....When I finally thought I had all of that cleared up and had my Blue/Gray Dent stabilized, some pink suddenly appeared in it. So I picked out these pink colors and isolated them. And when I grew them I had the albinoism and firing to deal with all over again....Those first few years would have been enough to discourage most breeders.

KENT: Were you picking out your best ear to save or just picking kernels?

ERNEST: That stuff came so fast that within just a few years I had solid-

colored ears and could just save the ears. But right at first I had to pick the kernels for most of the colors....The hull color comes from the female parent (the seed that you plant). The inner colors come from the male parent (from the pollen). So you can actually develop anything you want if you try hard enough. It's fascinating....

KENT: The one that always catches my eye is your Green Dent because it's such an unusual color for corn. How did you come up with it?

ERNEST: That came from the original bronze/black corn that I got from crossing the black popcorn and the yellow field corn. I kept a little patch of it by itself just to see what developed. One fall I happened to be looking at it in the sun to see how many different colors I could get to reflect. There were some blues, some purples, some brownish-bronze and the like. And one time here was this bright green reflection. You had to hold it just right. That fired my imagination! I wondered if it would ever be possible to produce a green color. I could see the possibility of producing most of these others, but green? I hunted and hunted through that stuff and every time I would find a kernel that had the faintest suggestion of a green reflection I picked it out and grew that in isolation....For the first ten years or so it seemed quite hopeless, just plain frustrating. Because only occasionally would I find a kernel that was really green. But all at once it started to get greener and greener and greener and greener. Every year it looked a little more promising, so I kept going. After about 40 years, lo and behold one fall when I was picking I found a couple of ears that were really green....But there's still a lot of work to be done on it yet. Even with the ear here in the case, if I were to plant that I would throw out all of the lighter green kernels. And a few of the kernels might have just a little too much of a purple cast to them. Throw them out because they are just going to pollute whatever you're after....One year Gurney Seed and Nursery wrote to me and wanted to grow 50 bushels of my Green Dent. They'd heard about me through different corn breeders I was corresponding with. That struck me kind of funny because all of the green corn I had right then I could hold in two hands. And they wanted 50 bushels!....I think they did get ahold of some of it in the late 1960s, probably from someone I'd traded seeds with. One year in their catalog I noticed what looked like my Green Dent, so I wrote them a really pointed letter asking them where they got that green corn. They immediately took it out of their catalog. They even refunded money to some of my friends who had ordered it. I wasn't really mad because they were offering it, but more because it wasn't perfected yet....

KENT: Where did the pure black and also the turquoise blue come from?

ERNEST: I found blue and black kernels both that same year. I don't think I've ever found any before or since. Just that one year, and I isolated them and eventually got the Blue Dent and the Black Dent....That Blue Dent is really the prettiest one of the whole bunch to my eye....I found them both in my Green Dent back in the very early 1950s. I was out there looking through my green corn patch. It still had a lot of yellow speckled through it. In fact, the little kids called it John Deere corn....I always like to look at the corn very closely. I think every husk had been opened, even when it wasn't ripe enough yet to pick. I'd usually already been through every ear kernel by kernel, so I'd

KENT: Where did the Brown Dent and the Purple Dent come from?

ERNEST: When I had most of these colors at least partially isolated, I'd take the purest seeds for my pure patches. The odds and ends I'd throw in a big washtub and plant it for pheasant food. That produced some interesting results. Especially after I got it mixed up with this Purple Husked corn. But the Brown Dent and the Purple Dent showed up in that mix. So I picked them out and isolated them. It didn't take very long to get them, either. After the first couple of years, I was getting quite a few ears that were solid purple. But that was really exceptionally fast.... Usually when I isolated a new color, the first few years I was getting popcorn and speckled and everything else. But there might be a little nubbin or small ear that would be perfectly dented and uniform colored a bright rose-pink. That would be my seed from then on. Then every year it would get a little more and more like I wanted it.

KENT: Did you ever do any hand-pollination during any of this process?

ERNEST: No. I let the wind do my work for me. You see, the prevailing winds around here are always from the northwest. And I've got a long, real narrow patch of ground up on the other side of the road that runs north-south. So after I got my colors up to the point where I had enough seed, I used my four-row planter to plant them instead of planting isolated patches. I'd put one color in and plant a 30-50 ft. section that was four rows wide. I'd clean out the planter real good and plant the next one.... So the wind would blow across this long north/south row from the northwest. What little mixing I got was right where two patches joined, but you could easily see that in a few ears. So I just kept seed from what I could see was improving. And year after year it improved.... Eventually I was planting those patches 20 rows wide.

KENT: So over the years you've selected all of these to the point that they're really stable.

ERNEST: Quite stable! But by no means do I consider any of them finished varieties. But they are to the point now that if you plant blue seed you will get all blue, but you may get some slightly different shadings of blue. I just wish I had 20 years more to work on them, mainly to get the ear size a little some more. I was afraid I was going to have to give up working with them completely. I've got real bad feet and can't stand to be on them for more than a half hour. But this spring I bought a six-horse Troy-Bilt.

KENT: Yeah, we've got the seven-horse Troy-Bilt with the Kohler engine. They're really incredible machines.

ERNEST: My, the way they work! My garden lay idle for four years and was full of box elder sprouts, some of them up to five feet tall. I figured I had to chop all of them out before I'd even dare to work it up, and I wasn't sure I could do it. So I thought, heck, I'll just see what this Troy-Bilt is made of. The first time through I got about half the trees. The second pass took about half of what was left and after the third pass there were hardly any left.

the big ones were just gone! Mine came with a Tecumseh motor and I've never heard it labor really. It just pops away and the little dinger keeps right on going. They're so smooth to operate, too. I'm really happy with it. And this year I'm growing some of my Green Dent in the garden.

KENT: So most of your corns were last grown in 1975?

ERNEST: Yeah. I do have some blue that I raised in 1979.

KENT: Just how long will corn keep?

ERNEST: Dent corn will keep quite a while. The corn I sent Carl Barnes I delayed sending for awhile because I wanted to check the germination. By testing it here myself, I found out that the germination was still over 92%.

KENT: Since 1975?

ERNEST: Most of that was from 1973. A lot depends on how it's stored. Some that tested the best I just had in metal cream cans downstairs. But most of it I've got in glass honey jars back here in a closet. I must have about a hundred of them....Over the years I've never made a practice of planting all of my seed. When I'd sort out my green or my blue or whatever, if I had just a little handful I'd just plant about a third of it a year.

KENT: I really try to tell the folks in the Seed Exchange to never plant all of any seed. If you do, you're just asking to lose it.

ERNEST: Yes, you are. One year I had a nice patch of the green corn planted in the bottom in the richest soil you'd ever want to see. But it rained a lot that summer and drowned it all out. It's a good thing I had some in reserve.

ERNEST: (Gets out another display case) - Here's brown pods, purple pods and calico pods in two colors.

KENT: I've only seen this white husked pod corn.

ERNEST: There's also this purple, a brown in addition, and the white. Once in a while for some reason this will throw a regular ear and when it does it has a brown cob. Down inside there's not much cob at all, it's more like a big stem.

KENT: People have written me about a red-kerneled pod corn and a yellow-kerneled pod corn.

ERNEST: You can get that any color you want. One year I picked a lot of this that had green kernels in it. You can cross it with anything. I think most of this was more or less a red popcorn inside when I got it. The stalk was purple.

KENT: These on the right are all popcorns, aren't they?

ERNEST: Yes. This one is Golden Australian-Hulless. It's one of the pretti-

est corns I've ever raised and is really a good popcorn too. This is the Black Beauty popcorn that I started all my breeding with. This probably is a cross between Red Beauty and Garnet. And this pinkish one, that's Pinkie Popcorn. That came from the old Oscar H. Will Co. over in Bismarck, North Dakota. It seemed like about half their catalog was just to satisfy people's curiosity. They had all these odd vegetables. They had a black sweet corn that was excellent with a fine flavor on a par with Golden Bantam. It was supposed to be ready to pick 60 days after planting. The ears on it were right down next to the ground and the whole stalk wasn't very big. They also had another excellent red Indian sweet corn called Nuetta. This Northwestern Dent, the white-capped red dent here in the display case, that's an Oscar H. Will corn too. At one time that was about the earliest dent corn in the country. I'm not sure, but I think that came from one of the North Dakota Indian tribes. The Oscar H. Will Company got most of their stuff from the Indians. I used to raise their Hidatsa Red Bean and another they called Arikara Yellow. I haven't seen either of those for years and years....

KENT: I dealt out both of them through our Growers Network this spring.

ERNEST: You did? I wouldn't have thought anybody in the whole country still had them. I like what you folks are doing....

KENT: This Rustlers White, you said that's an old field corn that farmers used to raise?

ERNEST: Yes. A lot of farmers raised that here in the 1920s. A lot of them raised this Calico Dent, too. I guess before my time a lot of farmers raised Bloody Butcher, too.

KENT: Did you introduce Bloody Butcher into your blend to get any of your colors?

ERNEST: None of them except this Orange Dent. There's kind of a story behind that, too. Once in a while in a patch of this Bloody Butcher red corn you'll get a few yellow ears. Once in a great while you'll find an orange one. So I'd plant the orange hoping to get orange. I never did. All I'd get was either the Yellow Dent or Bloody Butcher. I didn't know what to do about it.... One year I was planting my regular field corn and I ran out of seed. I only needed just a little bit to finish up a strip. I had a sack full of Yellow that I had saved out of the Bloody Butcher, so I used that. I figured it would probably produce mostly yellow. And you know that darn stuff came about one-third of each color—yellow or orange or red. I got more orange in that than I ever did trying to plant from the orange. Now after saving orange ears from that, I can get orange ears every year.

KENT: What's this Purple Husked corn?

ERNEST: Many seed companies use that purple husked stuff to separate or mark seed plots. I've seen it around experiment stations a lot in the fall.... This pretty striped one here is Calico Dent. I've used it to originate a lot of corn of my own. Cross the Calico with the Blue Dent and you get Blue Calico. Here's

a cross between the Pink Dent and the Calico with the red stripes on the pink kernels. Besides the red stripes on blue and the red on pink, I've seen red on green and red on brown....You know, some of the prettiest corns that you can get—I've seen a few ears that were accidents in my mixed pheasant plots—are a solid black ear with either bright blue kernels speckled through it, or bright green kernels speckled through it, or a bright rose-pink. I think you can get any combination you want, really. You won't get 100% for a while, but as long as you get just a few ears you can always start in from there and go on....

There was a kid up there by Elbow Lake who used to peddle fish out here. He heard about my corns and got interested in raising some. Well, he had a dollar sign in each eye, thanks to the coaching he got from his relatives. He grew a wonderful crop of that corn and then asked me if I had any more seed he could get next year. I said, "What, didn't you save any?" He said, "Nope, I sold it all"....Make money. That's the object of the game today. Over the years it's really bothered me that nobody kept any interest in anything like this corn, or the wildflowers, or the birds. Nobody was interested because it didn't make them any money. And all the while, life was getting so monotonous. Everything is the same. There is no variety anymore. Back in the old days, you had variety in the birds and the flowers and in the garden. You'd go to the county fair and people would exhibit all different kinds of garden vegetables, all different kinds of corns. Today, you go down there and one or two hybrid companies show off some of their yellow corns, brag about their yields, and that's your corn exhibit....Well, variety is not only the spice of life, but it's essential if our civilization is even to survive!



Ernest Strubbe and Some of His Corn Paintings

(The 1982 Fall Harvest Edition, pages 32-37)